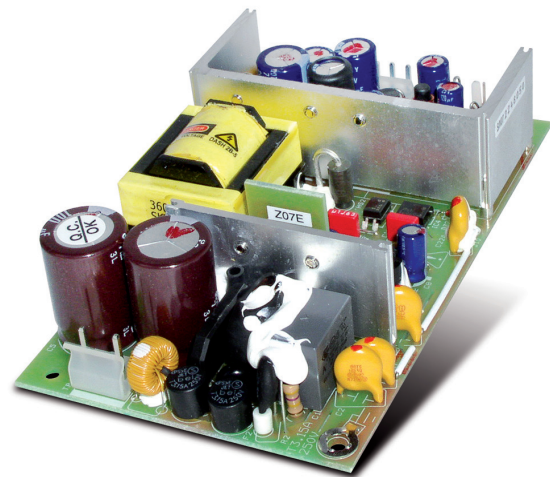


# SNP-Z07 series

70 Watt

- For demanding industrial applications
- Efficiency  $\geq 75\%$
- Operating temperature up to  $+70^\circ\text{C}$

The units of the SNP-Z07 series are ideal power supplies for medical and industrial applications in an operating ambient temperature range from  $0^\circ\text{C}$  to  $+70^\circ\text{C}$ . High-grade components are the basis for the high MTBF of the series. Optionally, casings and connector cables are available for all models.



Industry

Technical data	
Input voltage	90...264 V AC
Input frequency	47...63 Hz
Input current	2 A (115 V AC), 1 A (230 V AC)
Inrush current	<30 A (115 V AC), <60 A (230 V AC)
Efficiency	75...86 %, depending on model
Hold up time	App. 20 ms (115 V AC)
Protection	Short circuit protection: Switch off with auto-recovery Overload protection: Switch off with auto-recovery Overvoltage protection: Switch off (model / response threshold) SNP-Z07B / (4 V...5 V), SNP-Z076, -Z071, -Z073 / (5.7 V...7 V), SNP-Z077 / (13.1 V...15.1 V), SNP-Z078 / (17.6 V...20.1 V), SNP-Z79 / (26.2 V...31 V), SNP-Z07T / (55 V...62 V), SNP-Z07E / (3.6 V...5 V)
Line regulation	$\pm 1\%$ at rated load and input voltage change of $\pm 10\%$
Load regulation	$\pm 1\%$ (A1, A2 load step $\pm 40\%$ related to 60 % rated load) $\pm 3\%$ (A1, A2 load step $\pm 40\%$ related to 60 % rated load) SNP-Z071, -Z073, -Z07E $\pm 5\%$ (A3, A4 load step $\pm 40\%$ related to 60 % rated load) SNP-Z071, -Z073, -Z07E
Earth leakage current	<300 $\mu\text{A}$ max. (240 V AC / 60 Hz)
Safety / EMC	TÜV (IEC / EN60601-1, 60950) / UL (UL60601-1, 60950)
Operating temperature	$0...+70^\circ\text{C}$
Derating	In the range of $+50...+70^\circ\text{C}$ , 2,5 % / $^\circ\text{C}$
MTBF	>217 000 h at $+50^\circ\text{C}$ , according to MIL-HDBK-217F
Storage temperature	$-40...+75^\circ\text{C}$
Operating humidity	10...95 % RH, non-condensing
Dimensions (WxDxH)	76.2 x 127 x 32.4 mm $\pm 0.5$ mm
Weight (net)	0.2 kg

Product specific data	
Remote sense	Regulation range 0.5 V (SNP-Z76, SNP-Z07B)

**Optional accessory** ▷▷▷ For detailed information please visit our website [www.bicker.de](http://www.bicker.de) and refer to the article number.

Article No.	Description	Article No.	Description
CB-Z071	DC cable harness, 600 mm, 8-pole (SNP-Z071, -07T)	CB-Z079	DC cable harness, 600 mm, 8-pole (SNP-Z079)
CB-Z073	DC cable harness, 600 mm, 8-pole (SNP-Z073)	CB-Z07E	DC cable harness, 600 mm, 8-pole (SNP-Z07E)
CB-Z076	DC cable harness, 600 mm, 8-pole (SNP-Z076)	X1-024	AC cable harness, 620 mm, 2-pole (SNP-Z07 series)
CB-Z077	DC cable harness, 600 mm, 8-pole (SNP-Z077)		
CB-Z078	DC cable harness, 600 mm, 8-pole (SNP-Z078)		

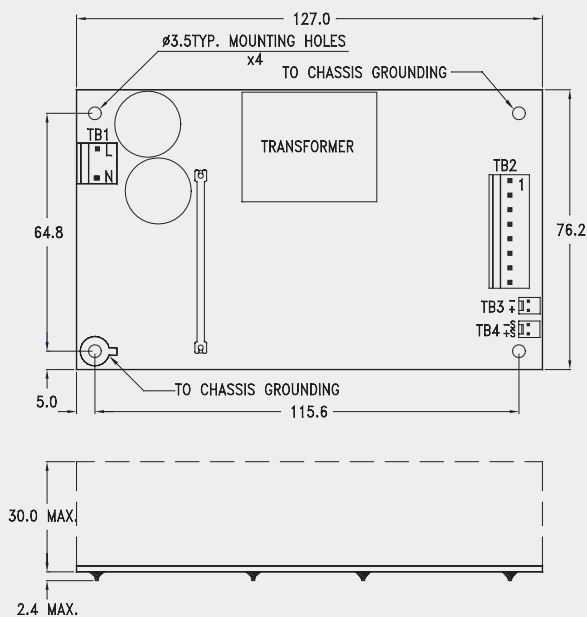
Article No.	Load	Output	Output voltage	Output current Min	Rated load	Peak load	Ripple & Noise	Efficiency
SNP-Z07B	50 W	A1	+3.3 V	0 A	15 A		<50 mV <sub>SS</sub>	75 %
SNP-Z076	70 W	A1	+5 V	0 A	14 A		<50 mV <sub>SS</sub>	79 %
SNP-Z077	70 W	A1	+12 V	0 A	5.6 A	9 A	<120 mV <sub>SS</sub>	81 %
		A2	+5 V	0 A	0.5 A		<50 mV <sub>SS</sub>	
SNP-Z078	75 W	A1	+15 V	0 A	4.8 A	8 A	<150 mV <sub>SS</sub>	82 %
		A2	+5 V	0 A	0.5 A		<50 mV <sub>SS</sub>	
SNP-Z079	75 W	A1	+24 V	0 A	3 A	5 A	<240 mV <sub>SS</sub>	84 %
		A2	+5 V	0 A	0.5 A		<50 mV <sub>SS</sub>	
SNP-Z07T	77 W	A1	+48 V	0 A	1.6 A		<480 mV <sub>SS</sub>	86 %
SNP-Z071	65 W	A1	+5 V	0 A	3.5 A	5 A	<50 mV <sub>SS</sub>	78 %
		A2	+12 V	0 A	3.5 A	9 A	<120 mV <sub>SS</sub>	
		A3	-12 V	0 A	0.3 A		<120 mV <sub>SS</sub>	
SNP-Z073	65 W	A1	+5 V	0 A	3.5 A	5 A	<50 mV <sub>SS</sub>	78 %
		A2	+12 V	0 A	4 A	9 A	<120 mV <sub>SS</sub>	
SNP-Z07E	71 W*	A1	+3.3 V	0 A	10 A		<50 mV <sub>SS</sub>	78 %
		A2	+5 V	0 A	7 A		<50 mV <sub>SS</sub>	
		A3	+12 V	0 A	2 A		<120 mV <sub>SS</sub>	
		A4	-12 V	0 A	0.6 A		<120 mV <sub>SS</sub>	

\*SNP-Z07E: Max. load at +3.3 V and +5 V must not exceed 45 W. If load is >80 % at +3.3 V, a minimum load of 5 V / >2.4 A must be connected at +5 V. Peak load can be for max. 8 sec. (For SNP-Z071, -Z073 only A1 or A2). Ripple and Noise was measured by a 15 MHz bandwidth limited oscilloscope with connected 0.47 µF ceramic capacitor (SNP-Z076: 10 µF electrolytic capacitor and 0.47 µF ceramic capacitor, SNP-Z079: 39 µF electrolytic capacitor and 0.47 µF ceramic capacitor) at each output.

As a power component this PSU is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards. In order to keep the EN61000-3-2 class D requirements an external passive PFC inductor is required.

## Drawing SNP-Z07 series

SNP-Z07B  
SNP-Z076



### Connectors:

SNP-Z07B:  
TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: Remote Sense / Molex 5045-02A  
TBD2: PIN1,2,3,4: +3.3 V, PIN5,6,7,8: GND

### SNP-Z076:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: Remote Sense / Molex 5045-

### 02A

TBD2: PIN1,2,3,4: +5 V, PIN5,6,7,8: GND  
SNP-Z077:  
TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2,3: +12 V, PIN4,5,6,7: GND,  
PIN8: +5 V

### SNP-Z078:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2,3: +15 V, PIN4,5,6,7: GND,

### PIN8: +5 V

(TB4: 12 V fan max. 100 mA)  
SNP-Z079:  
TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2,3: +24 V, PIN4,5,6,7: GND,  
PIN8: +5 V

### SNP-Z07T:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A  
TBD2: PIN1,2,3: +48 V, PIN4,5,6,7: GND,

PIN8: n.c.

### SNP-Z071:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2: +5 V, PIN3,4: GND, PIN5,6: +12 V,  
PIN7: -12 V, PIN8: n.c.

### SNP-Z073:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A, T  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2: +5 V, PIN3,4,5,6: GND, PIN7,8: +12 V

### SNP-Z07E:

TBD1: AC-input / Molex 5277-02A,  
TBD2: DC-output / Molex 5273-08A series,  
TBD3: LED / Molex 5045-02A,  
TBD4: fan / Molex 5045-02A  
TBD2: PIN1,2: +3.3 V, PIN3,4: GND, PIN5,6: +5 V,  
PIN7: -12 V, PIN8: +12 V

### Note:

The remote sense connection (voltage readjustment) can be connected directly to the load via twisted cable. Fan connection: 12 V / 250 mA max., SNP-Z079: 24 V / 250 mA LED connection: a series resistor is installed on the PCB

Tolerance ±0.5 mm